ABSTRACT OF THE DISCLOSURE

A Raman pump module for generating pump radiation having a pump wavelength (λ_p) for coupling into a transmission fiber of an optical wavelength division multiplex (WDM) communication system to provide Raman amplification of WDM radiation counter propagating therethrough is disclosed. The pump module is for use in a communications system in which the WDM radiation has a transmission waveband (λ_s) and wherein the transmission fiber has a zero dispersion wavelength (λ_m) lying midway between the transmission waveband and the pump wavelength. The module comprises a Raman pump laser for generating the pump radiation and a de-correlator for de-correlating the longitudinal modes of the pump radiation before it is coupled into the transmission fiber.